

THE FARMER & GARDENER

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, E. P. ROBERTS AND SAMUEL SANDS—EDITED BY E. P. ROBERTS.

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BALTIMORE: TUESDAY, JULY 10, 1838.

The communication of *Powhatan*, which is in another column, will be found truly interesting. It is from the pen of an esteemed and highly intellectual correspondent, with whom we have but one fault to find, and that is this—that his favors are “too few and far between.” If he knew how much the public valued his writings, we are certain he would not so seldom and so reluctantly gratify them, unless he forms an exception to his kind, and is utterly divested of that ambition, which is the common property of men of genius and learning—the pride of authorship.

Marl.—We insert in another column a very interesting letter from Mr. George W. Karsner, of Delaware, to the editor of the “*Delaware Register*,” detailing his experiments in the use of the green sand, or marl. The result of those respective experiments, are highly satisfactory, and go incontestibly to prove, that in this article, farmers convenient to the deposits of it, have a most invaluable agricultural resource. To the people of Delaware, New Jersey, and those other States, where it exists, it cannot fail to be of immense and lasting advantage, if they but improve the opportunity which it offers of fructifying their fields. That they may embrace the occasion, so propitiously presented, of improving their lands and bettering their conditions, is our most sincere wish.

Marl, in some of its forms, we have no doubt, exists in the tide water regions of all the Atlantic States, and it remains for the legislatures thereof, to put on foot such surveys and explorations as will identify its localities. They owe such efforts alike to their constituents, themselves, and to that pride of state, which should characterise every representative of the people.

Succoring Dutton Corn.—In answer to the question—“Should Dutton corn be succored?” the editor of the *Cultivator* says:

“We answer—the same rule will apply to the Dutton that applies to other corn—it increases the proportion of sound grain, and somewhat accelerates the ripening process—though it does not, we think, increase the quantity, while it sensibly diminishes the good forage, and causes additional labor. We do not succor our corn.”

Buckwheat.—Let every farmer who regards the comfort of his family—who values the gratification of their appetites—put in a patch of this grain as speedily as possible, and his good wife, in the superior quality of her cakes, will make him confess that there is no accompaniment for a winter breakfast equal to bread made from Buckwheat. But independent of its good qualities as a table luxury, it has other things to recommend it. It is the best thing on which hens can be fed in the winter, the large quantity of lime which it contains contributing greatly towards the formation of the shell of the egg, and thus imparting to the hen increased capacity for laying at that period of the year. It is good food for horses and hogs, possessing, when ground, the property of fattening in an eminent degree.

Turnips.—Let us recommend to our agricultural brethren to get in their turnips as early as convenient. If possible, they should be sown by the 25th of this month. The old rule of delaying this operation until the 20th of August is too late, as in the changed condition of our climate, the early frosts are liable to cut them off before time is allowed for them to ripen, if delayed that long.

But above all, we recommend that no one should attempt to sow turnips without manuring his ground well. Cow dung, ashes, or well rotted manure is to be preferred, and, in all cases, where practicable, four or five bushels of dry ashes to the acre should be sown on the turnips, while the dew is on the plant, as soon as they come up. If this process is properly performed, the fly will not be able to effect their destruction. Should ashes not be convenient, 1 bushel of plaster of Paris and 4 lbs. of flour of sulphur will answer. Should this not be to be had, three bushels of bran sown on them to the acre will answer.

Let the grower be sure to thin them out to the distance of 12 inches apart, and hoe them two or three times, so as to keep the soil open until the leaves are sufficiently expanded to shade the ground and keep down the weeds.

If the labor of hoeing is more than he can accomplish, let the cultivator run his harrow through them, which will perform the double office of thinning and working the ground, and greatly add to the quantity of his crop. He need not be afraid of injury from the use of the harrow. This latter operation should be performed just before a rain.

Corn.—The *Cultivator* should be freely used in the corn field during this month, to extirpate weeds and grass, and keep the ground open.—This instrument alone should be used after the corn attains much size, as it contributes greatly towards the growth, and advances the early maturity of the growing plants, without injuring their roots. We have long thought that the cutting up the roots of corn with the plough, was the cause of its being fired, and this opinion, we think, is founded in nature and reason, as it must be obvious to common sense, that every wound and laceration of the roots must act injuriously, by depriving the stalks not only of their sources of pasturage, but by causing a positive waste of nourishment absolutely necessary to their complete development. Besides this serious objection, it turns up the manure, exposes it to the deteriorating influence of the sun and air, and thus robs the grain of the nutriment intended to perfect its growth.

Briars.—If you have briars growing where your cattle feed, pour brine over them, and your cattle will, in their love for salt, destroy them.—The labor of pouring brine over the briars, will not be much greater than that of salting your cattle, while that more irksome one, of cutting up the briars, will be performed by your cattle, so that, as a matter of economy of time and money you should pursue this course to get rid of those most troublesome pests.

A wager is a fool's argument.

Hay.—In stacking away your hay sprinkle salt over each layer. A peck of salt to the ton of hay is enough. The operation prevents the hay from heating, improves its quality, and renders it far more acceptable to your stock, and, in a great measure, does away with the necessity of salting them through the winter.

Meadows.—Farmers will consult their interest by keeping their stock off their meadows after the grass is cut; the after growth being necessary to protect the roots from the inclemency of our long and severe winters. We are sure that much harm is done to meadows by grazing them in the fall, and that it is to this cause we are to ascribe their early giving out, as every blade of grass thus destroyed, will be succeeded by some pestilent weed, as the earth makes a continual effort to clothe itself with herbage of some kind or other, and should man by his folly deprive it of its artificial covering, nature comes in to supply the effect of his bad management.

If weeds should spring up in your clover fields after your last cutting, they should be cut down and carted off to your dung heap; by this operation two good things are effected: 1st, the weeds being taken off, do not seed and fill your clover field with their kind the succeeding year, and consequently, a clean crop of hay will be secured—and 2dly, your stock of manure will be increased.

Weeds.—If time can be spared, let the weeds and briars from the head-lands, lanes and fence corners, be cut up and carted to the manure heap, and next year your stock of these pests will be quite decreased.

Test of good Flour.—Mr. John Babcock, of London, gives the following rule to ascertain the quality of flour; as the test is a simple one, and we doubt not as good as simple, we transfer it to our columns, in the hope that it may enable those who purchase the article to select it of good quality. Should it prove of use, we know we shall have the thanks of every good house-wife, for there is nothing that ladies, who are attentive to the economy of house-keeping, more deservedly pride themselves on than good bread, and this cannot be obtained without good flour.

"Flour which is pure and unadulterated, may be known by your seizing a handful briskly, and squeezing it half a minute; it preserves the form of the hand in one piece, although placed rudely on the table. Not so with that which contains foreign substances; its adhesive property is weak, and it falls to pieces immediately. The whiteness of flour is no evidence of its goodness; the different materials used in adulterating flour, have a tendency to whiten it."

The Crops generally.—In all directions we learn that the wheat crops are more abundant than for many years. On the Eastern Shore of this state, from all we hear there will be more made than there were the two last years together. The crop in Virginia will prove equally productive.

The crop of Rye on the Eastern Shore of this state, is, however, not so good: in other quarters of our country, we are pleased to learn that this crop has proved all that the farmer could desire.

The corn every where, whence we have information, looks well, and promises to reward the husbandman well for his labor.

The crop of grass is every where abundant, and, as far as the cutting has proceeded, has been got in well, so that the beasts of the field will have ample supplies of good hay the coming winter.

Curing of Hay.—No farmer should cure his hay except in small cocks; besides being the safest way, the hay is 20 per cent. better when thus cured.

Management of a horse while travelling.—The whole art of managing a horse while on a journey, so as not to injure him, is contained in the subjoined simple petition. In every line there is so much common sense, so much true philosophy, that the justness and propriety of the rules laid down will strike the most cursory reader.

Petition of the Horse to his Master.

Up the hill urge me not;
Down hill crowd me not;
On the plain spare me not;
In the stable forget me not.

Prevention of lice on fowls.—When confined, or when simply roosting, in an enclosed house, fowls are apt to become infested with lice, in the warmer months. Dry wood ashes, put on the ground where they dust themselves, will very soon free them.

The Tobacco crop of Tennessee.—We are truly glad to learn that the early fears which were entertained of the destruction of the tobacco plants have not been realized to the extent anticipated, and that the crop promises to be a fair one.

VIRTUES OF MARL TESTED.

Letter from George W. Karsner.

Mr. Huffington.—Dear Sir—In compliance with your request, I now offer for your consideration, and if you think it worthy, for publication, in your valuable work, a plain statement of facts relative to my experience in the use of an article which is generally termed marl, of the green sand character. In what is called marl, there is a great variety, both in appearance and substance. Mine is all of the kind known by the name of green sand marl. Did I not consid-

er it a duty I owe to my fellow-citizens of Delaware, in addition to my promise to you, I should have declined making this statement, and have left the task to be performed by some abler and more experienced person. But considering that I was among the first in our State, who used the green sand as a fertilizer of the soil, and hoping that a knowledge of the results of my experiments from its use may have a tendency to benefit the farmers of Delaware, I shall proceed to disclose them. I am still making other trials of this substance, and when the results are known, I will communicate them to you.

The discovery of the green marl of New Castle county, begins very generally, to claim the attention of farmers, particularly in the lower part of the county, although there has not as yet been very extensive use made of it. In the beginning of January 1835, I discovered, what I considered at the time, a bed of excellent marl. I had found the same substance on my premises nearly a year previous, but from its not containing any visible marine substance, such as oyster and muscle shells, I had no confidence in its valuable quality, and therefore suffered nearly a whole year to be lost, before I tested its value by application to the land. In the winter of 1836, I caused an opening to be made in a ravine, near the waters of Silver creek, which passes through my farm, and had from thirty to forty loads thrown out, which lay until the spring, when I commenced using it on different crops. My first experiment was made upon oats sown in April; but from the large quantity used, the oats did not seed or fill well, although there was a very luxuriant growth of straw, much of which was over five feet high, and of great thickness. I exhibited a sample of the oats to the Hon. A. Naudain, and his son Dr. James Naudain; and at the same time a specimen of the marl, for their inspection and analysis. They both assured me, that the growth of the oats was alone a sufficient test to satisfy every one of the value of the marl. Nevertheless, they were kind enough to make for me a minute examination of its quality, and the result of their analyses proved that my marl, on an average, contained ten and a half per cent. of potassa, besides a small portion of lime and gypsum. And here allow me to express publicly, my gratitude and thanks to those gentlemen, for the trouble and expense they took upon themselves, in order to ascertain by scientific experiments, the component parts and qualities of my marl.

Having thus become convinced of its fertilizing quality, I proceeded to get out and use a larger quantity, both for the purpose of improving my lands, and to bring the substance as a manure into more general notice; which I now fully believed, if found in sufficient quantities, would sooner or later, be the means of rendering the poor lands of Delaware equally productive, if not more so, with the limed lands of Pennsylvania. I was also more confirmed in my opinion, by reading in the New Jersey papers, various accounts of experiments in the use of a like substance and their great success on the lands of that State. Thus encouraged, I got out all I could of my own lands.

My next experiment was on a late crop of potatoes, planted in the latter part of May. I manured the whole lot with stable manure, with the

exception of four rows, two of which were planted without manure or marl, and the other two left for the experiment of marl. On these two rows, I placed the marl nearly of the same thickness as I did the manure, on the other parts of the lot. I watched the progress of the crop closely, and found during the season, that the manure caused a much larger growth of tops than the marl, and the marl a considerably greater growth than where the soil was suffered to remain in its natural state. This showed me again very plainly, that marl was worth something. Another fact struck my observation—the tops of the manured potatoes had dried and burnt very much, while those that were marled, retained until frost a very green and luxuriant appearance. I did not expect, from the growth of the tops, that the marled rows of potatoes would be as productive as the lot, as the manured; but when I gathered the crop, I found on actual measurement, that the marled rows had one-fourth of a bushel of potatoes more, than any two rows of the manured in the lot; and near one hundred per cent. more than the soil alone was able, or did produce. This experiment I assure you, fully confirmed me in the belief, that the green sand, or marl, was not only equal, but superior to stable manure for the growth of potatoes.

My next trial took place in the month of August in the same year, on a crop of buckwheat.—The ground was very poor, being situated on the side of a hill, where the soil was entirely washed away, and light and sandy in its nature. I had it well broken up with the plough in May, harrowed and let it lay until the first of August, when I hauled upon it and spread broad cast, about 160 bushels to the acre, as nearly as I can judge. I then gave it another very shallow ploughing, and sowed the buckwheat, leaving for the sake of contrast, a small spot without marl. The crop grew rapidly, and the difference between the marled land and where none was used was very great.—The natural soil only produced a growth of six or eight inches in height, while that which was marled, averaged nearly 3 feet, and was very luxuriant in its appearance; but in consequence of the early frost of that year, my crop of buckwheat was considerably injured, and my profits greatly lessened. This, however, did not alter my opinion as to the value of the marl, as the same result must have happened, no matter by what means the soil had been enriched.

I should have previously noticed, that in June, on a single land in my clover field, I spread five small cart loads of marl not averaging more than twelve bushels, equal to about 120 bushels to the acre. Its operation was not discovered on the growing crop, as it was nearly ripe at the time, and soon after harvested, but on the second crop, a marked difference was very soon discovered.—A number of gentlemen came to examine it, who concurred in opinion, that there was fifty per cent. more clover on that land; than there was on the adjoining lands in the same field. I was satisfied myself, that there was a great difference, but could not believe it so great, until the clover was cut in September for seed, when the opinion of the gentlemen alluded to, was fully sustained. But this was not all the advantages derived from the use of the marl on this land. A very considerable crop of white clover was produced,

which was not to be found in the other parts of the field.

The latter part of the same month (September) the whole field was ploughed preparatory to the wheat crop, which was sown early in October; and although I had realized such an incredible difference in the product of clover, I scarcely entertained a hope of seeing any effect of the marl upon the wheat, as the deep ploughing I use in seeding, I supposed had buried it so deep, that its present effect would be lost, and not be seen again till thrown on the surface, by ploughing for another crop. The winter, if you recollect, set in early, and the wheat had made but little progress during the fall. In the spring of 1837, the wheat generally, looked very indifferent; and the probability was, that we should have a very short crop, as it had been so much injured by the severe winter of 1836-7. As it regarded my own prospects, I would have willingly, early in the season, have taken the cost of the seed and expense of seeding for my crop. But as the season advanced, the prospect brightened; and at harvest, a tolerable crop was realized. On the part of the field I had marled, it grew better than on the manured land, and continued to outstrip it until harvest. A number of neighboring farmers visited the field to witness the growth and appearance of the wheat, and nearly all were of opinion, that there would be at least one hundred per cent. more wheat cut from the marled land, than from any other where neither manure or marl had been used. Among the visitors was our State's geologist, Mr. Booth, and Major Stockton, one of the geological commissioners, who will readily agree, I doubt not, to my statement, of the great benefit derived from the action of the marl upon a part of my wheat crop of the said year, 1837. Since harvest, the same prominent difference is observable in the growth of grasses. The marled land is well set in red and white clover, while immediately alongside of it, little or none is seen. One thing I had nearly forgotten to mention; while nearly my whole wheat field was much struck with rust, the marled part of it was as bright and clear as could be desired; there being neither rust or smut to be found there. The wheat on the marled land ripened, and was ready to harvest several days before the manured wheat.

The field contains forty acres, and I believe if I had marled the whole at the same rate as I did the land, of which I have been speaking, which would have cost me only about one hundred dollars, instead of cutting little more than three hundred bushels, I should have obtained at least 600 bushels. I sold my wheat at \$1.60 per bushel, and if I had marled the whole field, after all expenses deducted, my gain in money could not have been less than three hundred dollars; and that gain would have been on the wheat crop alone, to say nothing of the advance in the value of the clover crop succeeding it.

My next experiment was made on about eight acres of ground in my corn field of last year, 1837. The ground was flushed up, and about 1600 bushels spread upon it, say 200 bushels to the acre. It was harrowed in well, so as to mix with the soil, previously to laying the ground out for planting. The marled lot was selected from the poorest part of the field, which had not been reached with manure, leaving a part of the same

quality of land on each side of the marled lot without marl, that a fair test might be obtained.—The corn was planted on squares of four feet.—After planting, I watched very closely its progress, and soon found a decided advantage in favor of the marled portion of the field. Its action on the young corn was very apparent and immediate, and by the time it was one foot high, any person could have traced the very last row where the marl had been used, without difficulty. The same difference was visible throughout the whole season; and when the corn generally was burning with drought, that which was marled, looked green and luxuriant, and maintained throughout the whole season, a wholesome appearance, without burning in the least, or changing its color.—The growth of the stock was much larger and higher than any along side of it, and in the earing a still greater difference was to be found. The universal opinion of those who examined the field was, that the crop would be doubled on that part which had been marled. Several gentlemen desired me to cause a measurement to be made, of an equal quantity of corn from the natural soil, and the marled land, to which I cheerfully assented. When gathering the crop, I made an accurate measurement of seven rows without marl, and seven where it had been used. The result was, that from the seven marled rows, I had 29½ bushels, and from the seven of natural soil, only 12½ bushels; making a difference in favor of the marled land, of nearly 130 per cent. The land I have now in wheat and oats, has all been marled; when these crops are harvested, I will cheerfully inform you of the results, for the information and benefit of the farming interest of Delaware.

There are large quantities of excellent marl in St. George's hundred, and many pits now opening, near Drawyer's creek, on the farms of Messrs. Polk, Croft, Rogers, McClane and Simms, within one mile of Cantwell's bridge; also, on the waters of Silver run, on the lands of Messrs. Glazier, Vandegrift, Townsend, Higgins, Jefferson and my own, which would not be to haul more than one and a quarter miles to Appoquinimink creek, where there is five and a half feet of water. I have lately opened a road to Augustine landing, on the Delaware river, at the lower end of Reedy Island, where I am depositing for sale, a quantity of green marl. Vessels drawing eight feet, can land and depart from this landing. The present price at the pits, is twenty-five cents per ton, which is very low indeed; but that is as it should be, until the use of the marl becomes general, and its benefits fully known and acknowledged. I am selling mine at the said price, and find the demand constantly increasing. I should also mention, that Thomas Stockton and the Messrs. Cleavers, near Port Penn on the Delaware, have green sand marl of good quality; as have several other persons in that section of the county. The quantity is thought to be inexhaustible in St. George's hundred; and we flatter ourselves, that, should the agricultural community take a proper interest in applying it to their lands, in less than ten years from this time, St. George's hundred must become the garden spot of the State of Delaware. You will perhaps say we are too sanguine in our hopes and expectations—if so, I will just refer you to the benefits derived to a part of New Jersey, which I visited for the ex-

press purpose of examining the Jersey marl and its action upon the soil. There the most sterile soil, has, in less than ten years, become almost a garden spot. Land which sold ten or twelve ago in the vicinity of Woodstown, for less than ten dollars an acre, cannot now be purchased for one hundred dollars an acre—and this sum has been offered and refused for much of it; the increased value of which is wholly to be attributed to the use of marl such as ours, and of no better quality. Our soil is naturally much better than that, why then, may we not anticipate similar advantages?

Your readers may rely upon the above statement of facts, and I hope they may profit by them. In this substance, the means is provided by Providence to enrich our lands in all parts of the State, and thus stay the tide of emigration to the wilds of the west; for what Delawarian would leave his dear little State, who has comfort and independence at home.

Near the Trappe, New Castle co., June, 1838.

To the Editor of the Farmer and Gardener:

A year or two ago there was a good deal said in your journal about a destructive little insect called chinch-bug (sometimes *chink bug*, *chintz*, and various other changes, almost as numerous as those which were rung on the name of *Douster-devil*)—which said insect you were to send to some great entomologist in London,* doubtless for wise and useful purposes. Since then I have observed nothing in the *Farmer & Gardener* on the subject. Within that time, however, they have been continually increasing in numbers, and no means have yet been devised to put a stop to their ravages. They now swarm in myriads over our wheat fields; and wherever the land is poor, the crops are nearly destroyed in some neighborhoods.

But I incline to think the aggregate product of our wheat crops will not be materially diminished by them. There has never been a greater crop within my knowledge. The wheat has ripened without being subject to any of the usual attendant evils of Hessian fly, rust, &c. Only the storms of the past week have prostrated it in some places, and tangled it generally, which will add considerably to the labor and expense of harvesting. But notwithstanding, there is abundant cause for thankfulness—and I trust a bountiful nature and good prices will once more make the heart of the farmer leap with joy—diffuse plenty throughout the land—and allay the thirst for emigration which numerous disastrous seasons have contributed to inspire.

So far from coinciding in opinion with certain writers,—I was going to say philosophers,—that in the course of a few short years, winter grain will no longer be cultivated in the middle and northern states in consequence of a gradual depression which the temperature of the earth is undergoing; I entertain the belief that for a series of years to come, we shall be blessed with bountiful crops. In regard to a change of temperature, the most philosophical opinion is, that the earth is very gradually drawing nearer and nearer to the sun, by a slight preponderance of the centripetal over the centrifugal forces. The conclusion therefore is, that there must be a gradual increase of temperature. And in respect to a favorable change

of the seasons, observant men have long been aware that seasons of the same character almost uniformly cluster together. Thus for the last six or seven years, the hopes of the farmer have been continually blighted—while previously, for an equal or greater length of time, the wheat crop was as certain as any other. Last year was the dawn of a better day; and though I pretend to be neither a prophet nor the son of a prophet, yet I then ventured to predict a still better crop for the present year. The cycle may be of longer or shorter duration; but for a period of some years, we may confidently expect that the earth will continue abundantly to reward the labors of the husbandman, in proportion to the energy and skill with which he conducts his operations.

Virginia, July 3d.

POWHATAN.

P. S. The general commencement of the harvest was on the 25th ult.

[*The bugs were sent, but ere they arrived were so grounded to powder by the friction of their transit, as to render it utterly impossible to tell to what genus they belonged.—*Ed. Far. & Gard.*]

BUTTER MAKING.

In a few remarks on this subject, it is not necessary for us to tell the dairy women that it is of the first importance that her milk pails, pans, pots, churn, &c. should be kept perfectly clean and sweet, for they are as fully aware as we can be, that unless this first grand essential of dairy management is strictly attended to, their whole efforts to produce either good butter or cheese, are in vain. But after all their care and precaution, their expectations are sometimes disappointed—the produce of this labor does not, in quality, come up to what they anticipate, and for what earthly reason they are not able to tell. It appears to them, that no neglect on their part can be the cause—they have been careful that all the preliminaries and the whole operation should be performed with skill, but still they are disappointed—there is wrong management somewhere, but it is beyond their ken to discover it. There are some few facts on this subject, which we have learned from agricultural books and papers, and confirmed by experience which perhaps are not so generally known as they should be.

That there is a great difference in the milk of different cows, every one of limited experience must have noticed, and that there is an equal difference in cream, and consequently in the butter made from it, is a fact equally apparent to an observer.

If a cow is driven a long distance or driven fast shortly before milking, it injures the quality of the milk, and it will not produce so much or so good cream.

If milk is disturbed after it cools and before the cream rises, it injures its quality and diminishes the quantity. Care should therefore be taken to strain the milk as soon as possible after it is drawn from the cow and before it cools. If milk be kept warm for any great length of time after it is strained, the cream will not rise to any degree of perfection. Therefore, the quicker the milk cools after it is in the pans, the greater quantity and better quality of cream will you obtain.—Wholesome pure air, is also an essential to raising cream in any degree of perfection.

Cream is lighter than milk, and the better the quality of the cream the lighter it is. Consequently, the cream that first rises to the surface, is the best. None but the richest and lightest particles of cream can rise through thick milk; therefore, such milk gives cream of a superior quality, but less in quantity than thin milk. But the milk is better as it retains a portion of the cream in it.—The milk in the cow's udder, is, in some degree, similar to what it is after standing some time in the pail.—The richest rises to the top, hence, the first drawn is not so good, and will not produce so much or so good cream as the last, and should be set in separate pans.

In order to produce a superior quality of butter, the best cream should be obtained, and in no case suffered to stand until it is moldy, or even until it is quite sour before it is churned. It should never be diluted with water, or made any warmer than the milk was when taken from the cow.—When the process of churning is commenced, it should be steadily continued until butter is produced, which should be immediately taken from the churn and all the milk worked out that can be conveniently. If it is sufficiently hard, it is better to free it from milk entirely; but this is not always the case. It should, therefore, be set in a cool place, and worked thoroughly with the butter ladle the next day. Having entirely freed it from milk, prepare a mixture of ground alum salt, saltpetre, and refined loaf sugar, in proportions of three parts of salt to one of saltpetre, and one of sugar, and work in thoroughly one and a half ounces to every pound of butter, and pack it into jars or firkins covered tight; and at the end of twelve months you will find it sweet.—*Maine Farmer.*

Singing conducive to health.—Many parents in encouraging the development of musical talents in their children, have no other view than to add to the number of their fashionable accomplishments and afford them a means of innocent solace and amusement. It was the opinion of Dr. Rush, however, that singing is, by young ladies, who by the customs of society are debarred from many other kinds of salubrious exercise, not only to be cultivated as an accomplishment, but as a means of preserving health. He particularly insists that vocal music should never be neglected in the education of a young lady; and states that besides its salutary operations in enabling her to soothe the cares of domestic life, and quiet sorrow by the united assistance of the sound and sentiment of a properly chosen song, it has a still more direct and important effect. 'I here introduce a fact,' remarks Dr. Rush, 'which has been suggested to me by my profession, and that is, that the exercise of the organs of the breast by singing, contributes very much to defend them from those diseases to which the climate and other causes expose them. The Germans are seldom afflicted with consumptions, nor have I ever known but one instance of spitting blood among them. This, I believe, is in part occasioned by the strength which their lungs acquire by exercising them frequently in vocal music, for this constitutes an essential branch of their education. The music master of our academy has furnished me with an observation still more in favor of this opinion. He informed me that he had known

several instances of persons who were strongly disposed to consumption, who were restored to health by the exercise of their lungs in singing.

The following communication was read before the Philadelphia Society for promoting Agriculture, at its regular monthly meeting, April 18, and ordered to be published in the Farmers' Cabinet.

STALL FEEDING CATTLE.

To the Philad. Society for promoting Agriculture.

Believing that the cause of Agriculture may be promoted by practical observations and statistical facts, and that theories and principles should be based on these, I beg leave to communicate a statement regarding four bullocks which I have had the pleasure of bringing to a high degree of perfection. One of these steers was admitted to be one of the fattest ever exhibited in the Philadelphia market, and the others very little inferior to him. By the annexed statement it will be seen that the result of between two and three years stall feeding, has been to pay me full prices for the grain, beets, and hay consumed, and allow the manure for straw and labor, a result that I think would satisfy any reasonable farmer or grazier.

At the same time to succeed well with feeding large cattle, it is necessary that they should be kind and good feeders. They should also be attended with especial care. Without these prerequisites the farmer had better sell his grain than stall feed cattle. ISAAC W. ROBERTS.
L. Merion township, Mont. co. Pa. April 17, 1838.

Statement to May 1st, 1838.

Nov. 15, 1835, bought two steers, estimated at 1750 lbs. dead weight, cost \$110 00
Commenced stall feeding them on the 1st Dec. and continued 150 days at 27 qts. per day, or 126 bushels at 70 cents, 88 20
They consumed two tons of hay at \$16, 32 00
The grain consisted of equal parts of corn and oats, ground, or corn and "mill stuff," or wheat bran. On the 1st of May, 1836, turned them on grass with a pair of oxen, estimated weight 1850 lbs. and valued at \$150 00

Statement from 1st May, 1836.

Cost as above of the four cattle \$380 20
Pasture during the season for the four, 80 00
Commenced feeding grain on the 1st of October, twice a day till 1st Dec. and then three times per day till 1st May, 1837, equal to 190 days full feeding of 2 bush. per day or 380 bush. as above at 70 cents, \$266 00
100 bushels Mangel Wurtzel Beets at 25 25 00
5 tons Hay at 80 00
\$331 20
Grass during the summer of 1837, 80 00
Commenced feeding grain on 1st Sept. 1837, twice per day till 1st Dec., and then three times per day till 19th Feb. say 140 days full feeding, or 280 bush. at 70 cents, 196 00
100 bush. Mangel Wurtzel, at 25 cents, 25 00
2 1/2 tons hay, at \$12, 42 00

\$1,174 20

On the 19th Feb. 1838, and sold them to Messrs. Drum, Wartman & Co. victuallers, for \$1290—In the spring of 1836, the two steers would have sold for \$240; and in the spring of 1837, I estimated them at current market price, as worth 750; and if then sold there would have been an apparent loss, but it should be remarked in explanation that the stall feeding extends to the 1st of May, whereas the season for selling is from the middle of Feb. to 1st March, when their cost was about what I estimated them as worth to the butcher.

RECAPITULATION.

First cost of the four cattle,	\$260 00
Pasture during two seasons,	160 00
Grain fed to them 786 bushels at 70 cts.	550 20
Mangel Wurtzel 200 bush. at 25 cts.	50 00
7 tons of hay at \$16,	112 00
2 1/2 tons of hay at \$12,	42 00

\$1,174 20

And being sold for \$1200 gives as before stated the manure for straw and labor, leaving a balance of \$27, and paying me a liberal price for the produce of the farm; about two-thirds of the grain consisted of equal measure of corn and oats, and one third corn and mill-feed.

By the foregoing statement it appears that the average increase in value of each animal was about \$100 per annum.

STATEMENT OF WEIGHT AND GIRTH. STEERS.

Live weight—	Dead Weight—	Girth.
No. 1. 2422 lbs.	1671 lbs.	9 ft. 1 inch.
No. 2. 2324 "	1619 1/2 "	8 " 9 1/2 "
OXEN.		
No. 3. 2555 "	1991 "	9 " 2 1/2 "
No. 4. 2261 "	1533 1/2 "	9 " 9 "

BLIGHT IN PEAR TREES.

From the Ohio Farmer.

Mr. Chew—I took occasion a few weeks since from my own observation and experience, to question the theory advanced by "Pyrus," a writer in the Genesee Farmer, on the subject of blight in Pear Trees. To get rid of the force of my argument, "Pyrus" modestly says, he is quite satisfied I am ignorant of the true blight, and that my trees died solely from the effects of cold. I have been somewhat familiar with the disease called the Fire Blight for more than forty years, the greater part of which time refers to the neighborhood of Boston, where he cites us for the most severe ravages of the true blight; and truly, I am not able to point out any apparent difference in the commencement, progress, and final result in all I have seen, from the blight which affected mine alluded to in a former communication; except in some instances, I have seen its operation on old trees loaded with fruit at the time.

A writer on the "Cultivation of Fruit, J. J. B." in the last number of the Genesee Farmer which has come to hand, after enumerating different theories on this subject, says: "Another opinion is, that fire blight is caused by a too rapid growth, producing a superabundant flow of sap in the branches, and consequent surfeit. In proof of this, the fact is adduced, that the most rapid growing trees are most subject to this kind of blight. But as such a cause would be an anomaly in vegetable physiology, it is far more probable it is

produced by injury from the cold of winter, which would of course chiefly affect the largest and most succulent growth." And in a note of the same writer, in the margin, he says, "The opinion that it is caused by the fruit rotting on the branches, is sufficiently disproved by the fact, that trees which have never borne are liable to it. For an instance of this, see Genesee Farmer, vol. iii. page 273." I quote from the article of "B." alluded to, as follows: "The ordinary attack of the blight was upon the limbs, and of the recent growth, at a distance from the terminal buds. It was first indicated by the bark becoming discolored, the leaves then turned brown, and the termination of the limb often remained green and fresh for days, after the bark below was withered and black. The elaborated sap evidently became vitiated, and carried with it in its descent. No preventive was known, and the best practice was to cut off the diseased limb, at a point where the wood remained healthy, and burn it. I have several trees from which the limbs were almost wholly cut, in a diseased state, which are now putting forth new branches and showing fruit—Where the diseased limbs were suffered to remain, the blight extended to the bole or trunk, and the entire tree, particularly when small, was destroyed. I have probably lost more than a hundred trees, not more than six or eight of which had produced fruit. The blight appeared in my grounds before any of the trees produced blossoms, and there were no bearing trees within a mile of me."

The authority of "J. J. T." and "B." on the subject, so far corroborates what I advanced, that it is probable "Pyrus" will pronounce us all ignoramus. But, with me that is of but little moment. I have no motive in writing but to arrive at the true cause, and a remedy for the blight, in whatever form it may appear. In the face of innumerable instances, where to every appearance the disease called the fire blight operated, and was the same in small and bearing trees, and that too in the same orchard. I am incredulous of the fact, although "Pyrus" still asserts his full belief, "that no tree was ever struck with the real fire blight, until it had arrived at the period and age of blooming; and that no branch or twig was ever affected with it, except a decayed and diseased fruit, or its process was at its extremity."

I am not prepared to say I have arrived at the true theory of the blight, but it appears plausible to me at least.

I apprehend the root of the evil to be in a very extended growth in autumn, so that the new wood does not become refined, but remains soft, porous and eminently exposed to the chilling blasts which follow; and in other cases, the sap rises too early in the spring, so that the cambium is afterwards frozen and vitiated in the tender branches, where, I believe, all concur the blight first begins to operate. In nearly, if not all the cases, in which the blight has come under my observation, it has operated upon trees of the most rapid and succulent growth; and particularly in seasons calculated to produce the effects I have named.

Does not the fact that amputation of the branches before the vitiated matter descends to the well ripened wood not being operated upon by the cold, go far to show the correctness of my position?

If my theory be correct, whatever will promote an early ripening of the wood in the fall, or retard vegetation in the spring, will be the best prevention of fire blight.

JOHN A. LAZELL.
Columbus, Horticultural Garden,
June, 1838.

GEOLOGICAL SURVEY OF MARYLAND,

BY PROFESSOR DUCATEL.

(CONCLUDED.)

Sec. VI.—On the occurrence of Coal in Frederick county.

Having received information that some indication of coal had been discovered in Fredericktown valley, and that a company had been organized to proceed to its further development, I conceived it to be my duty, before closing my operations for the past season, to make an excursion into that part of the county where those indications were reported to have been observed; with a view of verifying them if possible, so as to be enabled to encourage those interested in the immediate prosecution of their work in their completion, or, under other circumstances, to guard them against any fallacious expectations. The region of country in which the supposed coal formation would occur, comprises an inferior ridge of hills, at the foot of the Catoctin Mountains, known by the name of the Red Hills, which, about the headwaters of the Lower Tuscarora, squires in a S. E. direction, forming what has more recently been termed the Chapel ridge. This ridge is composed mainly of the breccious limestone, associated with a shaly red sandstone amongst which are occasionally seen detached blocks of Trapp rocks. The region extends to the Point of Rocks, where the mineral mass is a compact talcose rock of green colour, and is undoubtedly a primary rock. In the minor hills adjoining, a talcose slate has been cut through by excavations made for the Rail Road.

I confess that I have seen nothing in this direction which favours the opinion, entertained by some, that it embraces an independent coal formation. The supposed indications that were pointed out to me, are not in reality such, being merely the outcroppings of a lead coloured talcose slate; and a specimen of coal, which was exhibited to me, was unquestionably derived from another quarter.

At a place called the Yellow Spring, six miles from Fredericktown, between the Little and Big Tuscarora; there is a remarkable formation presenting strong indications of coal. The associated rocks are, a bituminous shale with impressions and remains of plants that are carbonized, and embracing seams of anthracite; a sandstone enveloping spangles of mica and containing carbonate of lime, a compact limestone slightly bituminous, and a calcareous breccia (Breccia of the Capitol.) Under existing circumstances the precise arrangement of the rocks cannot be determined. The carboniferous shale occasionally appears at the surface, and is at other times enveloped by the calciferous and micaceous sandstone. Ledges of breccious limestone are also seen cropping out, on the more elevated spots of the formation, and, within it, is embraced a band of blue bituminous limestone. The general inclination of the rock is

at an angle of about 45, with a dip to the N. The direction of the formation is N. E. and S. W. and its characteristic features have been traced over an extent of only three miles with an average breadth of one mile. Several excavations have been made into it, with praiseworthy zeal and enterprise by Mr. William Hoffman; but they are of moderate depth—the deepest being only 20 feet, with an additional boring of 40 feet through a grey sandstone. The horizontal diggings into the shale reach only to a few feet, in which seams of coal have been discovered, the largest of which is about two inches.

From the above description of the locality it will no doubt be judged interesting; though it is difficult to pronounce upon its importance as a subject of individual enterprise. The discovery of a coal formation, even of moderate extent, in the vicinity of Fredericktown, would be of incalculable value to its inhabitants, who would be fully justifiable in employing adequate means to bring it to light; whilst such an undertaking would at the same time, certainly merit the encouragement of the State, since it might result in great benefits to the whole community. Whatever assistance I may bring to the project in my official capacity will be most cheerfully given; but warned by past experience, I do not think myself authorized to undertake the search at the expense exclusively of the State; although there is apparently, in the act authorising the survey, a provision for defraying the costs of similar explorations. It behooves me only to say, that in my opinion the subject is deserving the attention of the State, and that to its entire development there should be appropriated a due proportion of the contingent fund of the survey.

Sec. VII.—Concluding Remarks.

Having, in conformity with the plan adopted in my former reports, furnished in the preceding pages an account of such counties, as in the course of my investigations have been either fully explored or sufficiently so, to enable me to give a general view of the actual condition, and of their mineral as well as other resources, it remains for me to submit to your Excellency, a statement of the present condition of our work, its past benefits, and the more sanguine anticipations of ultimate advantages to be derived by the people in the completion of the Survey.

It will be recollected, that the act authorising the survey made it imperative upon me to commence my operations in the tide-water districts, the full examination of which I was to complete before proceeding to the upper counties. It was not supposed, from what was known of the nature of the country, that it contained any great amount of resources, and strong prejudices against its healthfulness, strange misrepresentations of its physical condition were very generally entertained, not only abroad but within our own limits. The thorough examination, which I have had occasion to make of this portion of the territory of Maryland, has resulted in showing, that its agricultural resources are inexhaustible, the average duration of human existence within it equal to that of any other parts of the State, its comforts and advantages superior to all, and its physical aspect as favorable as could be desired. The report of these facts has gone far, it is believed, to remove the unfounded prejudices that rested upon

it, and I appeal with entire confidence to your Excellency for the truth of the assertion that the value of property has been much enhanced by spreading before the world a knowledge of them. If advantage, then, be taken of these resources, I feel authorized to say, that this portion of our State, not long since reported as stricken with pestilence and poverty, will be looked upon as the garden spot of Maryland, and this will have been one of the fruits of the survey. Not only will the happiness of the people and the general prosperity of the country be increased, but its political importance will be augmented, by inducing men of enterprise and property to become our fellow citizens, as has already been the case in many instances within your Excellency's own knowledge.

In carrying out the provisions of the act of 1833, I have not confined myself to a mere indication of the presence of minerals of value, or resources at hand, but I have studied their economical uses, as already known, or likely to arise out of a better acquaintance with them, and in this manner it has been my good fortune to suggest some novel applications of them, for the benefit of both the agricultural and manufacturing interests of the State. Every new inquiry gives rise either to an improvement upon old methods, or to the creation of a new enterprise, and in both ways contributes to increase the industry and to augment the wealth of the State.

Having now completed the survey of the tide-water districts I am prepared to pursue my researches in the upper counties, where it has been long known that great mineral stores lie imbedded, which, although in many places they are already objects of active exploration, still require to be more closely examined into, with a view to their full development, as well as in the confident expectation of reaching new resources. The discovery during the past year of a large body of very valuable ore, in Montgomery Co. is an earnest of what may be expected to be the results of the survey in the upper counties of the State.

Considering then what has been, and what remains to be done, it is gratifying to find that our most sanguine anticipations of the benefit of the survey have been fully realized in the past, and that the future, promises to be equally marked by important results. It is also a cause of gratification to perceive, that wherever the people have had an opportunity of becoming acquainted with the objects of the measure—adopted for their exclusive benefit—it has met their hearty concurrence, whilst the confidence of its original friends in its eventual complete success remains unshaken.

Before concluding, I have to acknowledge my indebtedness to the Topographical Engineer for the drafts, made with his usual neatness and ability, of the Maps that accompany and illustrate this Report.

Map A, embraces Kent and Cecil counties, exhibiting their topography, and indicating their prominent geological features, as well as the principal localities of the mineral resources which they contain.

Map B, of Montgomery county, is less complete in its details, but is also intended to illustrate what has been remarked in the Report of its topography, geological features and mineral resources.

I feel bound, in conclusion, to express to your Excellency, my sentiments of gratitude for the interest you have manifested in my labors, as well as for the many marks of personal kindness I have experienced at your hands. With sentiments of great regard and esteem, I remain,

Very respectfully,

Your obedient servant,

J. T. DUCATEL,

State Geologist.

Annapolis, Dec. 26, 1887.

[From the Genesee Farmer.]

BRIEF HINTS FOR THE SEASON.

A subject too much neglected during the middle of summer is the extirpation of weeds. If the nourishment which goes to support the weeds on some farms were applied to the crop, the owners would soon get rich. Weeds are as injurious to the crop as a herd of intruding cattle, and should therefore be removed with as much determination.

There is one rule which will apply in destroying all weeds of whatever kinds; this is, that they cannot obtain access to the air. Hence weeds, the most difficult of extirpation, are soon routed by cutting them off as fast as they appear above ground, or by burying them repeatedly with a plough.

Repeated ploughings for destroying weeds is best whenever they have obtained possession of the ground, as in case of Canada Thistles, St. Johnswort, and some others; and indeed it is much better to devote the ground a year or two to clearing, where they have spread extensively, than to lose two-thirds of the use of it by them perpetually.

Some weeds are easily removed with a common hoe, as for instance, mulliens, thistles, &c., which infest pastures; cutting them off at the surface of the ground generally destroys them at once. Docks are very easily removed when the ground is softened with rain, by pulling them up.

In order to prevent the trouble of destroying a field of weeds, they should be watched and rooted out at their first appearance, when it will not cost a thousandth part of the labor. Canada thistles, milk weeds, oxeye daisy, couch grass, charlock or field mustard, and others; whenever they first appear, should be immediately destroyed.

Whole fields are frequently seen covered with a luxuriant crop of the large field thistle, if they were cut and raked with a horse rake into large heaps they would make excellent manure.

Farmers should use every means practicable to obtain and preserve all the manure that can be done—they should recollect that a good load of manure properly applied, is better than a silver dollar. What most needs attention now, is to preserve the manure which remains unspread during summer, to prevent its wasting by fermenting and evaporation. This is effected by covering it with a coating of earth mixed with about one quarter lime.

Farm implements should always be of the best kind, even if they cost considerably more; if a workman with a good tool can do one-third more labor, he will soon repay the additional cost.

The advantages of frequent stirring of the earth among crops have been sufficiently proved;—a

rusty hoe in summer is a sign of a poor farmer." But the practice of *hilling* in cultivating hoed crops, is injurious; and it is found by experience that in all common cases, preserving the surface of the ground flat or nearly so is much preferable. For this reason, the *cultivator* should be used in preference to the one horse plough, and if the rows have been planted straight and even, all the weeds may be cut up by it within two or three inches of the plats.

Mowing should not be commenced until the stalks of grass begin to change a little to a brown color, or when the seeds are approaching maturity. A greater quantity of nutriment is then contained, the hay is sweeter to the taste and is not so tough as otherwise, and the hay is more easily dried. Grass beaten down by rain, should, however, be cut before it becomes injured in this way while uncut.

A great defect in curing hay, and more especially clover, is drying it too much in the sun. The more improved practice is to dry it partially in the swath and finish by what is termed the *sweating* process, or drying in small cocks, the heat of a very slight fermentation assisting. The labor of spreading is thus saved, there is little injury from exposure to dew, and the thin leaves and succulent stalks become equally dried together. Where this plan has been tried, many successive days of rainy weather have not prevented the making of excellent hay; and indeed while the outside of the cock is wet by the falling rain the interior has been constantly drying by the slight heat generated. Every farmer should at least try this method, and every one who tries it fairly adopts it.

We still see, in many places, the common hand rake employed to collect the hay on the meadow.—This should be no longer tolerated. When it can be raked by a horse with one fifth the expense, it is surprising that so many adhere to the old practice. If farmers are unwilling to procure a revolving rake, let them at least provide themselves with the common horse rake. The cost is only two dollars, and it will pay for itself in less than half a day, and in half an hour, if a shower of rain is coming upon a crop of new hay. Attach the draught ropes to the other teeth cut to about one-third the length of others, and no difficulty will be found in managing it.

We last year saw a meadow of fifteen acres raked with a common horse rake in about six hours of time actually employed, a part of which yielded three tons to the acre, and the whole of the hay was drawn to the stack, chiefly from the winrow, by the horse and rake, sufficiently fast to keep a strong active man (who had previously laughed at the plan) hard at work all day to pitch it on the stack. By regulating properly, by means of the handles, the pitch of the teeth, loads were collected which were a load for one horse to draw. One man only (without any rider) was sufficient to manage it. It abridged the labor so much, that cutting the grass was more than two-thirds of the work done on the meadow. On extensive and smooth meadows, we would by all means recommend the revolving rake in preference to any other, and the hay sweep (described last year in the Farmer) to collect and draw it to the stack or place of deposit. But the common horse rake may be used on any meadow, if not intolerably rough.

Mowers should commence work by four o'clock in the morning, when the air is cool and the grass moist, and then they may rest in the heat of the day.

In harvesting grain, it is much better to cut it a few days before it is perfectly ripe, than to allow it to stand too long: If cut when not entirely ripe, and bound up *before the straw becomes dry, it will derive nourishment from the stalk* sufficient to ripen it before the sheaves become thoroughly dry.

The great advantages of cutting early rye, the grain is not wasted by shelling, the straw is worth more, and it enables the farmer to drive business and prevent losses from bad weather and other delays.

Lodged and rusty grain should in all cases be cut as soon as admissible, as little is gained by suffering it to stand long.

Whenever it is necessary to leave grain upon the field after it is cut, it should be put up so as to withstand any rain without injury. This may be easily effected by placing about six sheaves closely together, pressing their heads to a point, and capping the whole with a seventh. The cap is made by binding a sheaf firmly near the lower end and spreading the straw on all sides by breaking it down over the band.

At this busy season of the year, the garden must by no means be neglected—the ground must be kept clear from weeds,—plants which need it watered in dry weather, always in the evening to allow the water to penetrate the soil before evaporating; herbs, as they come in flower, must be cut and dried for future use; they must be cut in dry warm weather, and always dried in the shade—fruit trees which bear too thick must have their fruit thinned, if it is wished to have it of any value as to flavor. In the flower garden, seeds must be gathered, labelled, and preserved as they ripen, and the roots of bulbous plants taken up as the tops wither and die; they are best preserved by drying them somewhat, in small heaps covered with sand or dry soil to protect them from the rays of the sun. As soon as taken up they should be labelled to prevent mixing.

Exercise—At least two hours a day should be spent in the open air. When the weather is such as not to permit the delicate to go abroad, Mr. Abernethy advises the windows to be thrown open and exercise to be then taken by walking up and down the apartments of the house. Walking is the most natural and convenient exercise, and to the healthy and robust, perhaps the best. Riding on horseback, especially to the dyspeptic, and to those who are threatened with consumptive complaints, has been highly extolled by physicians, and with justice. Dr. Paris recommends digging in a garden as a useful and agreeable exercise. The best time for taking exercise is three or four hours after a meal, when digestion has been complete, when the nutritious chyle has entered the blood vessels, and when the body feels refreshed and invigorated.—*Economy of the human body.*

SAXON RAMS FOR SALE.

For sale, 4 full bred Saxon Rams, 3 to 4 years old.
Enquire of
EDWARD KENLY.
July 3

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every Monday

	PER	FROM	TO
BEANS, white field,	bushel.	1 25	—
CATTLE, on the hoof,	100lbs	8 50	9 00
CORN, yellow,	bushel.	72	73
White,	—	69	70
COTTON, Virginia,	pound	9	11
North Carolina,	—	10	11
Upland,	—	9 1/2	11
Louisiana — Alabama,	—	10	11
FEATHERS,	pound.	48	50
FLAXSEED,	bushel.	1 12	—
FLOUR & MEAL—Best wh. wh't fam.	barrel.	10 00	—
Do. do. baker's,	—	—	—
SuperHow. st. from stores	—	7 50	—
" wagon price,	—	7 00	—
City Mills, super,	—	7 75	—
" extra,	—	8 00	—
Susquehanna,	—	—	—
Rye,	—	4 50	—
Kila-dried Meal, in hhd.	hhd.	18 09	—
do. in bbls.	bbl.	3 50	—
GRASS SEEDS, wholes. red Clover,	bushel.	—	—
Kentucky blue,	—	2 50	3 00
Timothy (herds of the north)	—	2 25	2 50
Orchard,	—	2 00	2 50
Tall meadow Oat,	—	—	3 00
Herds, or red top,	—	1 00	1 25
HAY, in bulk,	ton.	10 00	15 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	—	7	—
HOGS, on the hoof,	100lb.	7 00	—
Slaughtered,	—	—	—
HOPS—first sort,	pound.	9	—
second,	—	7	—
refuse,	—	5	—
LINE,	bushel.	33	34
MUSTARD SEED, Domestic, —; blk.	—	3 50	4 00
OATS,	—	26	27
PEAS, red eye,	bushel.	1 12	1 12
Black eye,	—	1 00	1 12
Lady,	—	—	—
PLASTER PARIS, in the stone, cargo,	ton.	3 62	—
Ground,	barrel.	1 50	—
PALMA CHRISTA BEAN,	bushel.	—	—
RAGS,	pound.	3	4
RYE,	bushel.	75	85
Susquehanna,	—	—	—
TOBACCO, crop, common,	100lbs	3 50	4 50
" brown and red,	—	4 00	6 00
" fine red,	—	8 00	10 00
" wrapper, suitable	—	—	—
" for segars,	—	10 00	20 00
" yellow and red,	—	8 00	10 00
" good yellow,	—	8 00	12 00
" fine yellow,	—	12 00	16 00
Seconds, as in quality,	—	—	—
" ground leaf,	—	—	—
Virginia,	—	4 50	6 00
Rappahannock,	—	—	—
Kentucky,	—	5 00	8 00
WHEAT, white,	bushel.	—	—
Red, best,	—	—	1 60
Maryland inferior	—	—	1 55
WHISKY, 1st pf. in bbls.	gallon.	33	33 1/2
" in hhd.,	—	31	—
" wagon price,	—	—	—
WAGON FREIGHTS, to Pittsburgh,	100 lbs	1 25	—
To Wheeling,	—	1 50	—
WOOL, Prime & Saxon Fleeces,	pound.	40 to 50	20 22
Full Merino,	—	35	40 18 20
Three fourths Merino,	—	30	35 18 20
One half do.,	—	25	30 18 20
Common & one fourth Meri.	—	25	30 18 20
Pulled,	—	28	30 18 20

MORUS MULTICAULIS TREES.

The subscriber has from 25,000, to 30,000. Morus Multicaulis trees now growing at his residence, with roots of 1, 2, and 3 years old, which will be ready for sale this fall, and which he will sell on moderate terms.

EDWARD P. ROBERTS.

BALTIMORE PROVISION MARKET.

	PER	FROM	TO
APPLES,	barrel.	—	—
BACON, hams, new, Balt. cured	pound.	13	13 1/2
Shoulders,	—	11 1/2	12
Middlings,	—	11 1/2	12
Assorted, country,	—	9 1/2	10
BUTTER, printed, in lbs. & half lbs.	—	20	25
Roll,	—	—	—
CIDER,	barrel.	—	—
CALVES, three to six weeks old	each.	5 00	6 00
COWS, new milch,	—	25 00	40 00
Dry,	—	12 00	15 00
CORN MEAL, for family use,	100lb.	1 62	—
CHOP RYE,	—	1 50	1 60
EGGS,	dozen.	12	—
FISH, Shad, No. 1, Susquehanna,	barrel.	9 75	10 00
No. 2,	—	9 50	—
Herrings, salted, No. 1,	—	4 25	4 75
Mackerel, No. 1, ———— No. 2	—	—	—
No. 3,	—	—	—
Cod, salted,	cwt.	3 00	3 25
LARD,	pound.	10	11

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

	PER	FROM	TO
U. S. Bank,	par	—	—
Branch at Baltimore,	—	—	—
Other Branches,	—	—	—
MARYLAND.	—	—	—
Banks in Baltimore,	par	—	—
Hagerstown,	—	—	—
Frederick,	—	—	—
Westminster,	—	—	—
Farmers' Bank of Maryland, do	—	—	—
Do. payable at Easton,	—	—	—
Salisbury, 1 per ct. dis.	—	—	—
Cumberland,	par	—	—
Millington,	do	—	—
DISTRICT.	—	—	—
Washington,	—	—	—
Georgetown,	—	—	—
Alexandria,	—	—	—
PENNSYLVANIA.	—	—	—
Philadelphia,	par	—	—
Chambersburg,	—	—	—
Gettysburg,	—	—	—
Pittsburg,	—	—	—
York,	—	—	—
Other Pennsylvania Bks.	—	—	—
Delaware [under \$5],	—	—	—
Do. [over \$5],	—	—	—
Michigan Banks,	—	—	—
Canadian do.,	—	—	—
VIRGINIA.	—	—	—
Farmers Bank of Virgi.	—	—	—
Bank of Virginia,	—	—	—
Branch at Fredericksburg, do	—	—	—
Petersburg,	—	—	—
Norfolk,	—	—	—
Winchester,	—	—	—
Lynchburg,	—	—	—
Danville,	—	—	—
Bank of Valley, Winch. par	—	—	—
Branch at Romney, par	—	—	—
Do. Charlestown, par	—	—	—
Do. Leesburg, 1 1/2	—	—	—
Wheeling Banks, 3 1/2	—	—	—
Ohio Banks, generally 5 1/2	—	—	—
New Jersey Banks gen. 3	—	—	—
New York City, par	—	—	—
New York State, do	—	—	—
Massachusetts, 1 1/2	—	—	—
Connecticut, 1 1/2	—	—	—
New Hampshire, 1 1/2	—	—	—
Maine, 1 1/2	—	—	—
Rhode Island, 1 1/2	—	—	—
North Carolina, 5	—	—	—
South Carolina, 6 1/2	—	—	—
Georgia, 8 1/2	—	—	—
New Orleans, 8 1/2	—	—	—

FOR SALE,

Two superior DEVON bulls, 4 years old this spring, of the purest blood in the country. Fine form and remarkably large. Any gentleman wishing to procure one will find it to his advantage to embrace the present opportunity, as they will be sold at the low price of \$100 each, deliverable in Baltimore.

Applications in writing, post paid, to be made to the subscriber.

EDWARD P. ROBERTS, Baltimore, Md.

may 29

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FARMERS' REPOSITORY OF AGRICULTURAL IMPLEMENTS AND EAST MAN'S CYLINDRICAL STRAW CUTTERS IMPROVED.

THE Subscriber informs the public that he has secured by letters patent his late and very important improvements on his Cylindrical Straw Cutter, by which improvements they are made more durable and easier kept in order. All the machinery being secured to an iron frame the shrinkage, wear and decay of wood is avoided. The feeding part of his improved machine is upon an entirely different principle from the former machine; far more durable, requiring neither skill or care to keep it in order. These machines are so constructed as to make the freight on them less than half what it cost to ship the former or wood machines, an important desideratum to purchasers living at a distance; and I now offer it to the public upon

the credit of my establishment as the most perfect machine in existence for the same purpose. They are also adapted to cutting rags for paper making, and for cutting tobacco as manufactured by Tobaccoists, &c.

I also keep these machines on hand made as heretofore with my new feeding machinery attached to them; and also a general assortment of Agricultural Implements, as usual. Elliott's Horizontal Wheat Fans, and Fox & Berland's Threshing Machines are both superior articles.

My stock of Ploughs on hand are not equalled in this city either for quality, quantity, or variety. I have a large assortment of Plough Castings at retail or by the ton, and having an Iron Foundry attached to my establishment can furnish any kind of Plough or Machine Castings on reasonable terms and at a short notice.

All repairs done with punctuality and neatness. On hand, a few Patent Lime Spreaders, Horse Powers, &c. &c. Also just received, a fresh supply of Landreth's superior Garden Seeds. In store, superior Timothy and Orchard Grass Seed and Seed Oats. All implements in the agricultural line will be furnished by the subscriber, as good and on as reasonable terms as can be had in this city, with a liberal deduction to who'sale purchasers. Likewise will receive orders for Fruit Trees from Mr. S. Reeves' Nursery, New Jersey.

JONATHAN S. EASTMAN,

Pratt street, Baltimore,

Feb 20

Between Charles & Hanover sts

TO THE PUBLIC.

Try the New Agricultural Establishment in Grant-street, next door to Dinsmore and Kyle.

Every article warranted to be first rate. The subscribers, grateful for past favors, take this early opportunity of returning their thanks to their customers and the public in general, and beg leave to inform them that they are now provided with a very extensive stock of newly manufactured AGRICULTURAL IMPLEMENTS, suitable to meet the call of Farmers, Gardeners, Merchants, Captains of vessels, and others, viz: 1000 Ploughs, assorted sizes, from \$4 to \$15 each, comprising of the old common Bar Shear, Winand's Self Sharpener; Woods & Freeborn's patent, all sizes, "Davis," "Sinclair & Moore's" improved Hill Side Ploughs, highly esteemed for turning the furrow down hill, with wrought or cast shears; Wheat Fans, of various sizes and patterns, from \$15 to \$50 each, warranted to separate the garlic from the wheat; Corn Shellers, from \$12 to \$20; Cutting Boxes, from \$7 to \$50 each; Corn and Tobacco Cultivators, large and small; Expanding do., Wheat Cradles, warranted to have fingers of the natural growth, and Grass Scythes, &c. &c.; Castings, of all descriptions and patterns, by the lb. or ton, to suit customers, allowing a liberal discount to merchants buying to sell again; all of which will be furnished on the most pleasing terms; and every article warranted to be of the best quality, in proportion to the cost price. All orders by mail or otherwise shall be duly attended to with the greatest despatch.

We would particularly call the attention of Country Merchants and others, wishing to purchase agricultural implements to sell again, to the fact, that we will furnish them with articles on better terms than they can be supplied at any other establishment in the city. Our assortment is complete and as varied as that of the most extensive concern in Baltimore.

We have also connected in its operations with the above branch of business a complete assortment of FIELD AND GARDEN SEEDS, kept by Thomas Denny—Also Garden and Farm Tools, of various sorts and of the choicest collection, which will enable our customers to have filled entire all orders in the Agricultural and Seed Departments. mh 26 JOHN T. DURING & Co.

GROUNDED PLASTER OF PARIS.

Of superior quality, in bbls. on hand and for sale by JONA. ELLICOTT & SONS,

may 8 31

south end of Patterson st.

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